



Tesselation 29 (R)

Suite: Tesselation Party!

by Arya Akhavan (November 2013)

Angles for R.I. = 1.540

35 + 8 girdles = 43 facets

2-fold, mirror-image symmetry

80 index

L/W = 1.039 T/W = 0.621 U/W = 0.202

P/W = 0.525 C/W = 0.172

Vol./W³ = 0.300

PAVILION

P1	42.50°	06-34-46-74	Cut to centerpoint.
P2	42.70°	04-36-44-76	Meet at culet.
G1	90.00°	80-40	Set stone width.
P3	44.84°	09-31-49-71	Meet P1, P2, G1
P4	44.44°	10-30-50-70	Meet P1, P3
G2	90.00°	09-31-49-71	Level girdle.
G3	90.00°	20-60	Meet P3, P4, G2
P5	66.22°	80-40	Level girdle.
P6	71.15°	20-60	Level girdle.

CROWN

C1	69.86°	09-31-49-71	Set girdle width.
C2	64.25°	80-40	Level girdle.
C3	34.74°	20-60	Level girdle.
C4	20.00°	16-24-56-64	Meet G2, G3, C1, C3
C5	30.49°	80-40	Meet C1, C2, C4
T	0.00°	Table	Meet C4, C5

Here's another pentagonal tessellation-style design. Cool science - this is from a Penrose tiling, not a true tessellation. You can't tile a floor entirely out of pentagons, and a true crystal can't have 5-fold symmetry!

Works in materials from quartz to CZ (RI = 1.54 - 2.16) with no changes, but I prefer it in morganite.

Suggested length = 6-10 mm

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